

CLAIMS

1. (Original) A unitary absorbent core having a basis weight of about 75 gsm or greater, comprising a fibrous absorbent layer having an upper fluid receiving surface and a lower surface with a hydrophobic vapor-transmissive moisture barrier integral with the lower surface of the absorbent layer.
2. (Original) The unitary absorbent core of claim 1, wherein the absorbent layer comprises natural fibers, synthetic fibers or a mixture thereof.
3. (Original) The unitary absorbent core of claim 1, wherein the hydrophobic moisture barrier comprises a hydrophobic material which at least partially coats the fibers of the lower surface of the absorbent layer.
4. (Original) The unitary absorbent core of claim 3 wherein the hydrophobic material is a natural or synthetic polymer.
5. (Original) The unitary absorbent core of claim 1 further comprising from about 5 to about 90 percent by weight of SAP.
6. (Original) The unitary absorbent core of claim 1, wherein the core has a basis weight of from about 80 gsm to about 1000 gsm.
7. (Original) The unitary absorbent core of claim 6, wherein the core has a basis weight of from about 100 gsm to about 500 gsm.
8. (Original) The unitary absorbent core of claim 1, wherein the core has a density of from about 0.03 to about 0.7 g/cc.
9. (Original) The unitary absorbent core of claim 8, wherein the core has a density of from about 0.04 to about 0.3 g/cc.

21. (Original) The unitary absorbent core of claim 1 having a barrier effectiveness value of 30 mm or greater.

22. (Original) The unitary absorbent core of claim 21 having a barrier effectiveness value of 50 mm or greater.

23. (Original) The unitary absorbent core of claim 22 having a barrier effectiveness value of 75 mm or greater.

24. (Original) The unitary absorbent core of claim 1, wherein the moisture barrier has a structure which substantially is fibers coated with hydrophobic material.

25. (Original) The unitary absorbent core of claim 1, wherein the moisture barrier has a reticulated remnant of a barrier material emulsion extending from the lower surface region of the absorbent layer to form an outer reticulated foam barrier.

26. (Original) An absorbent article comprising:

- (a) a liquid pervious top sheet, and
- (b) a unitary absorbent core of claim 1.

27. (Original) The absorbent article of claim 22 further comprising a microporous backsheet.

28. (Original) The article of claim 26, wherein the article is an infant disposable diaper, a training pant, an absorbent surgical pad, an adult incontinence device, a sanitary napkin, a pantiliner or a feminine hygiene pad.

29. (Original) A process for the production of a unitary absorbent core having a basis weight of about 75 gsm or greater comprising a fibrous absorbent layer having an upper fluid

